



12/15/03

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Dkt. No. 03818/1200029-US2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Dieter Soll

Serial No.: 10/661,399

Filed: September 12, 2003

For: GLUTRNA^{GLN} AMIDOTRANSFERASE - A NOVEL ESSENTIAL
TRANSLATIONAL COMPONENT

December 11, 2003

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:

(Check one of the boxes A-D)

☒ A. Within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.

☐ B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.

☐ C. after (A) and (B) above, but before the mailing date of a final rejection, a notice of allowance, or any other action that closes prosecution, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

Docket No. 03818/1200029-US2

- ☐ i. Counsel states that, upon information and belief, each item of information listed herein was either (a) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.
- ☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Counsel states that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the IDS; or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ i. A check for the fee set forth in 1.17 (p), presently believed to be \$180, is enclosed.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO-SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A and/or B and fill in blanks, if appropriate.)

- ☐ A. Document(s) _____ is (are) deemed substantially cumulative to document(s) _____, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- ☒ B. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

09/355,622, filed September 23, 1999.

Applicant Identifies these documents by attaching hereto copies of the forms PTO-892 and PTO-SB/08 from the files of the prior application(s) or a fresh PTO- SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

☐ 3. Document Nos. _____ are not in the English language. In accordance with 1.98(c), Applicant states:

- ☐ An English translation of each document (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application is enclosed.
- ☐ A concise explanation of the relevance of document(s) _____ is found in the attached search report (see MPEP § 609 A(3)x).
- ☐ A concise explanation of the relevance of document(s) _____ is set forth as follows: [Insert concise explanation of relevance]
- ☐ A concise explanation of the relevance of document(s) _____ can be found on pages _____ of the specification.
- ☐ A concise explanation of document(s) _____ can be found on the attached sheet.

☐ 4. No explanation of relevance is necessary for documents in the English language (see MPEP § 609 A(3)).

☐ 5. Other information being provided for the examiner's consideration follows:

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless other-wise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

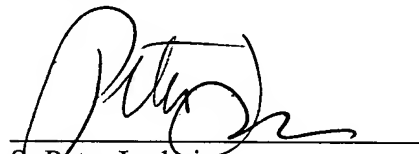
CROSS REFERENCE UNDER 37 C.F.R. §1.78 TO RELATED APPLICATIONS

Pursuant to 37 C.F.R. § 1.78, Applicant notes that the above-identified patent application may be related to the following U.S. Patent Applications:

(1) U.S. Patent Application Serial No _____, filed _____.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,


 S. Peter Ludwig
 Registration No. 25,351
 Attorney for Applicant(s)

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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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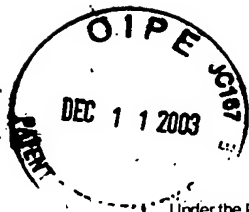
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|---|---|----|---|--------------------------|--------------------|
| Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | 10/661,399 |
| | | | | Filing Date | September 12, 2003 |
| | | | | First Named Inventor | Dieter Soll |
| | | | | Art Unit | N/A |
| | | | | Examiner Name | Not Yet Assigned |
| Sheet | 1 | of | 2 | Attorney Docket Number | 03818/1200029-US2 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| | AA** | US-6,136,560-B1 | 10-24-2000 | Black et al. | |
| | AB** | US-6,150,340-B1 | 11-21-2000 | Black et al. | |
| | AC** | US-6,171,838-B1 | 01-09-2001 | Black | |
| | AD** | US-6,200,774-B1 | 03-13-2001 | Black et al. | |
| | AE** | US-6,207,647-B1 | 03-27-2001 | Black et al. | |
| | AF** | US-6,248,557-B1 | 06-19-2001 | Black et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|--------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | BA** | EP-0 191 221-A1 | 08-20-1986 | | | |
| | BB** | EP-0 786 519-A2 | 07-30-1997 | | | |
| | BC** | EP-0 857 786-A1 | 08-12-1998 | | | |
| | BD** | EP-0 863 207-A1 | 09-09-1998 | | | |
| | BE** | EP-0 857 785-A1 | 08-12-1998 | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|-----------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | CA** | Curnow, AW et al. tRNA-dependent asparagine formation. Nature. 382(6592):589-590 (1996) | |
| | CB** | Curnow, AW et al. Glu-tRNA ^{Glu} amidotransferase: A novel heterotrimeric enzyme required for correct decoding of glutamine codons during translation. Proc. Natl. Acad. Sci. (USA) 94(22), pp. 11819-11826. | |
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| | CD** | Jahn, D. et al. Purification and Functional Characterization of the Glu-RNA ^{Gln} Amidotransferase from Chlamydomonas reinhardtii. J. Biol. Chem 265(14): 8059-8064. (1990) | |
| | CE** | Kim, SI et al. EMBL Accession No. U49790. Bacillus subtilis PET112-like protein gene, complete cds. Submitted (Feb. 22, 1996). | |
| | CF** | Schon, A. et al. Protein biosynthesis in organelles requires misaminoacylation of tRNA. Nature. 331(6152): 187-190. (1988) | |
| | CG** | Strauch, MA et al. Characterization of the Glutamyl-tRNA ^{Gln} -to-Glutaminyl-tRNA ^{Gln} Amidotransferase Reactin of Bacillus subtilis. J. Bacteriol., 170(2):916-920. (1988) | |
| | CH** | Tabata, S. EMBL Accession No. D90907. Synechocystis sp. PCC6803 complete genome. Submitted (June 28, 1996). | |
| | CI** | Wengender, PA et al. Identification of a PutP Proline Permease Gene Homolog from Stephylococcus aureus by Expression Cloning of the High-Affinity Proline Transport System in | |
| Examiner Signature | | | Date Considered |



PTO/SB/08a/b (08-03)

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| | | | | Art Unit | N/A |
| | | | | Examiner Name | Not Yet Assigned |
| Sheet | 2 | of | 2 | Attorney Docket Number | 03818/1200029-US2 |

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| | | Escherichia coli. Appl. Env. Microbiol. 61(1):252-259. (1995). | |
| | CJ** | Wilcox, M et al. Transfer RNA As A Cofactor Coupling Amino Acid Synthesis with that of Protein, Proc. Natl. Acad. Sci. (USA). 61:229-236 (1968). | |
| | CK** | Wilcox, M. Gamma-glutamyl phosphate attached to glutamine-specific tRNA. A precursor of glutamyl-tRNA in Bacillus subtilis. Eur J. Biochem. 11(3):405-12 (1969). | |
| | CL** | Wilcox M. Gamma-phosphoryl ester of glu-tRNA-GLN as an intermediate in Bacillus subtilis glutamyl-tRNA synthesis. Cold Spring Harb. Symp. Quant. Biol. 34:521-528 (1969) | |
| | CM** | Curnow, A. W. et al., "Bacillus subtilis Glu-tRNA ^{Gln} amidotransferase subunits C (gatC), A (gat A) and B (gatB) genes complete cds." EMBL Accession No. AF008553, 18 November 1997. | |
| | CN** | Kos, T. et al., Abstract: "Nucleotide sequence of the Aspergillus niger trpC gene: structural relationship with analogous genes of other organisms," Curr. Genet. 13(2):137-144 (1988). | |
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| | CP** | Zalkin, H., "The Amidotransferases", Advances in Enzymology and Related Areas of Molecular Biology 66, A Meister, Ed., pp. 203-205 and 282-287 1993. | |
| | CQ** | Zalkin, H., "Glu-tRNA ^{Gln} amidotransferase" Methods in Enzymol. Vol. 13 Glutamate, Glutamine, Glutathione, and Related Compounds, A. Meister, Ed., 113:303-305 (1985). | |
| | CR | Kim, Sung-II, et al., "A Nuclear Genetic Lesion Affecting Saccharomyces cerevisiae Mitochondrial Translation Is Complemented by a Homologous Bacillus Gene", Journal of Bacteriology, Sept. 1997, Vol. 179, No. 17, pp. 5625-5627. | |
| | CS | Curnow, Alan W., et al., "Glutamyl-tRNA ^{Gln} amidotransferase in Deinococcus radiodurans may be confined to asparagine biosynthesis", Proc. Natl. Acad. Sci., USA Vol. 95, pp. 12838-12843, October 1998. | |

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¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|



Application No. (if known): 10/661,399

Attorney Docket No.: 03818/1200029-US2

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Information Disclosure Statement (4 pages)
Form PTO SB/08 (2 pages)
Two (2) documents